

3/3/15 7:45am
net @ Hampton

Stephanie DeJoy - EPA

Alyssa Tien

Megan Shirley - COPAC

Bob McDaniel

Mike Bonovich

Sonia Erickson - WPCM

cell - 719-648-3462

- presentel credited

- Views map
- looks for
- will not
if no

- CDOT -
Ricky Shemper
- 14 day
- post-sta

Old Ranch Road 8:14 am

Construction

Sonya
Stans

Yan Hen - PM
- CDOT
Tom Herman - Wilcox

- schedule 45 hrs ahead
- Review JWMF
 - check for TECS name
 - check for what BMPs on site are checked
 - Sonya may correct if she sees a BMP not checked
- checks maps

- Tab 5 - BMPs
- CDOT will

- ~~the~~ Tab 6 - L
- checks have
- not
- in
- discuss
Liej

- Tab 7 - Calen
Tab 8 review
3/3/15
"Snow"
- doesn't
BMP
- typical base

Yan: Constructing bridge over power

- Tab 9 - 14 - de

@ Hampton

↳ EPA

- COPAC

- WFLM

- 648.3462

rel

8:14 AM

~~Yan Han~~ Yan Han - PM
on Herman Wilcox - CDOT

has ahead

MP

TECS name

what BMPs on site
what

may correct

she send a BMP not

id

badge or powers

- Views map

- looks for recent entry date

- will ask about new BMPs
if no recent date

- CDOT -

Ricky Shemper & TLES do Inspections

- 14 day, monthly

together

- post-storm

- Tab 5 - BMPs not per CDOT site -

- CDOT will sign it

- ~~Tab~~ Tab 6 - Weekly meetings

- checks to see if they
have weekly meetings

- not required by
- involve all SW

- discuss BMP with

Lisa, driving over BMPs

- Tab 7 - Calendar of inspections

Tab 8 reviews inspections - daily

3/3/15 daily inspection

"Snow No Work"

- don't document runoff,

BMP control

- typical issues - not dating of ~~initials~~

initials

- Tab 9 - 14-day, storm inspections

#14-day inspected & for 30-day
monthly inspection conducted by
Sonya Sonya

- Can take up to 3 photos per
findings

- If there is a finding - System
email Ricky, Yun, TLES

- Contractor will fix issue w/in 48 hrs
- Sonya views & approves corrective

- If more than 48 hrs to ^{complete}
fix, submit interim fix w/
narrative & when they will fix
issue - hydrology design issue
- still must submit a final
fix photo

- Repetitive failing issues - always
~~correct~~ corrective issue

- Sonya will ask them to
install a more aggressive
BMP - but they may not
do

* Repetitive issues - keeps writing it
up, keeps coaching them, usually come
around, can talk to CDOT Resident Engineer
& Design builder leader b/c (Yun)
contractor hold permit

[- Copy of 3/4

- Tab 11

- 105 forms

- communicate
+ CDOT

~~Yun email~~

- Hydrology Engineer
Review review

Andy Steck
Chris Dennis

- Sonya inspect &
Maintenance in

- CDOT Engineer &
if built to spec

- Sonya recommend
I-25 widening

PE of CDOT
- would do a
discharge =
water

* When they
draining to
BMP

- Sonya &
they did

for 30-day
after conducted by

to 3 photos per

CARL
3 findings - System
Yun, TUES

fix issue w/in 48 hrs
if approve corrective
then 48 hrs to

interim fix w/
when they will fix
prologis design due
to submittal - final
etc

issues - always
active issue
will ask them to
a more aggressive
band they may not

1 - keeps writing it
asking them, usually come
all to CDOT Resident Engineer
Mike Harder b/c (Yun)
- holdy permit

7- Copy of 3/4/15 monthly inspection

- Tab to 11

- 105 forms

- communications w/ contractor
+ CDOT

~~Yun want~~

- Hydraulic Engineer in Region 2
would review

Andy Steckline - ~~Dist~~ Lake Office
Chris Dennis Chress - Pueblo office

- Sonya inspects ND BMP for
Maintenance issues
- CDOT Engineers review to see
if built to spec

- Sonya recommended stop work for

I-25 widening - she said
PE of CDOT

- would do for active illicit
discharge = sediment impacting
water

* When they had more grass
drainage too small a
BMP

- Sonya wrote in report,
they did not upgrade BMP

- Minor rain event, could tell BMPs were failing based on amount of maint. needed

- Big rain caused issues

- Encourage stop work

- was not a total stop

order, still saw them working

~~Liquid~~

- Could do liquidated damages

- that has not happened in her time

- PE would also

* Sonya not clear on what

or when liquidated damages are

* PE may not follow green book procedure

- Site Walk

- ① - checks to see if CWA being met
on
Laminar
Start @
2
check to make sure stock pile had down gradient protection

* - Viewed some silt fence down road

Sonya
- took photo of dust suppression to show they are doing it

② Walked on SB on ~~solid~~ sediment
* Std. U ~ 50

③ Exit/Entrance w/ * Sonya would not typically require V, it's not code

④ repaired walkway
* no ~~ask~~

⑤ silt fence down

⑥ - Sediment flowing
walk? Sed. on

⑦ into pipe - sediment

- Mike indicated it to be cleaned

- Sonya thought of a pipe project

- took into inlet

⑧ * Storm drain inlet, here 2 State C on NW side

* Sonya walk to battle to address

in event, could
be here failing
amount of
needed

caused issues
stop work
not a total stop
still saw them working

undated damage
not happened in her time
also
clear on what
liquidated damage

not follow green
curve

IL CUV facing over
silt make sure stock
no down gradient

no silt fence down

done suppression to
me doing it

② Wickets on SD on South
side
with sediment
*Std. is ~50% height

③ Exit/Entrance w/o trucked - New SE
*Sanya would not
typical require VTC b/c
it's not onto public roadway
interchange

④ repaired wickets
*no ~~stock~~ crossed stock
⑤ silt fence down
After SE
side along
Power

⑥ - Sediment flowing over
wicket? Sed. on top, 75%
⑦ into pipe - sediment

- Mike indicated it needs
to be cleaned out
- Sanya thought it was mostly
pile project

- look into inlet

⑧ * Storm drain inlet, wickets should
have 2 silt fences crossed per Std.
on NW side
* Sanya would not pick this
battle to address

- (9) inlet N central side
w/ H₂O only 1 stake
- (10) inlet NE
- some wattle were older - left by ~~the~~ present work
* not per CDOT spec

- (11) - check Tab 5 P.M.P on
- for New
* How is it approved?

- BFT
- Repair - some day or next day
 - Sungas Findings
 - Clean out apron @ inlet
 - Clean out rock sock @ inlet
 - on W side

Tom will correct some

- * Song didn't think wattle needed
work by apron where it was
overlapping

Tom has asked you if
they can add permanent rip rap
where wattle had issues

End 12:52

New Dur

- CDOT @ Union
11:28 am

- manhole

(12) interior of v
outlet

* (13) outlet - erod

* (14) down stream
- not like this is

Some

- to Pine Creek
* check dam w/ r/r
does not look @
wee not inspected
inspected

- have to c
to see if
a permit

Pond ~~South~~ Su

11:49

- If sediment
inlet or 2^o
Based on gne
mark to Union

* (15) inlet sediment

* (16) Outlet - orafit
plugged water

(17) outlet has been
- earth disturbed

at side
L stake

... older - left by
... friend
... work

DMP on

approve?

... day or next day

... Apr 11 @ inlet
... rock socks @ inlet

... into Luttles needs
... when where it was

... had Yhr if
... permanent cap
... let work

... but 19.52

New Dir.

- CDS @ Union Courtch

11:28 am

- manhole

(12) interior of vault
outlet → inlet

* (13) outlet - eroded

* (14) down stream of outlet washed out
- not like this in July according to

Sony

- to Pine Creek

* check down stream - Sony
does not look at them, they
were not inspected by previous
inspectors

- have to check Hydrologic Regime
to see if they were called out
at a permanent base

... but 11:41

Pond ~~South~~ South of Power

11:49

- If sediment backing into
inlet or 20-25% capacity
(based on guess), we ask
... to clean it out

* (15) inlet sediment

* (16) Outlet - orifice holes

plugged, water backing up
(1) outlet has been fixed south side and
- earth disturbed

Filler Filterrooms - 2 Nof Woodman
Kill on flat lawn

(18) inside south filterroom
* Vegetation - have had time getting
it to grow
- before main. last year, could
not see much
- Sonya tells them to maintain
annually
out 12:18

Powers + Dublin 1:22
- looked for BMPs - road along
(19) Power SE corner

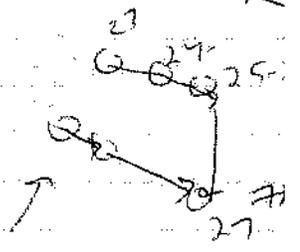
(20) NE side
- 2 check dams + 2 culverts
* Veg. growing in old sediment
- very light to a field
out 1:35

Garden of Gods + I-25 1:52
SE Pond - has asked main to clean
out channel

* (21) inlet - full of sediment on channel
* (22) outlet - need cleanup
(23) wide outlet
- there is another overflow outlet
* (24) - wide severe overflow - sediment

numbering off, but

(25) BOB 3 lbs
* (26) - inside 1st ch
high 1 debris
* (25) + (26) - 2nd char
(27) outlet - *



these
new cleaner - as
they asked they to
post inspected

NE Pond
(28) inlet - sediment
(29) outlet, plugged
(30) inside outlet
(30) - 2nd view in
NW Pond (31)

* (32) screen - post
- over the plate
(33) inside outlet
* (33) inlet on N.
* (34) E inlet - sedi
* (35) " " view

- 2 No of Woodmen
on the fence
It was hard time getting
last year, could
take them to market

1:12

run along

down 2 culvert
2 in old sediment
on field
out 1:35

Int I-25 1:52
2 main to check

of sediment on channel
all cleaned

no overflow outlet
overflow sediment

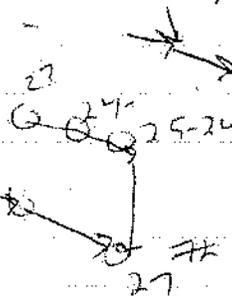
Numbering off, but sequence is correct

(24) BMB 3 chamber vaults

* (24) - inside 1st chamber full of
debris

(25+26) - 2nd chamber

(27) outlet



- Wet from overflow
structure

these

new cleaner - may be an overflow
that asked them to clean out in
past inspection

VE Pond

(28) inlet - sediment pile

(29) outlet, plugged

(30) inside outlet

(30.5) - 2nd view into outlet

VE Pond

* (31) screen - partially blocked
- another place not plugged

(32) inside outlet

* (33) inlet on N. - sediment mound

* (34) E. inlet - sediment, debris

* (35) " " view into inlet

2:40

3:46
2:16 PM

I-25 + Waltham SE corner

- (36) - inlet
- (37) - pond - sediment & trash
- * (38) - outlet of top pond, sediment
- (39) - inlet ~~at~~ bottom pond - sediment
- (40) - outlet bottom pond
- * sediment in middle up to top
- (41) " - there were 3 at
- * (42) cut in bank below bottom
- pond
- (43-45) series of drop structures
- (46) just prior to creek
- bank corner
- Sediment drain
- (47) point of discharge to creek

(48-49) - other construction site
 404 permit?
 Megan will check for state
 permit
 3:05 pm

- discussed next day
 Sonya Erickson @ state.co.us

drove Sonya back to car, done
 3:20 pm

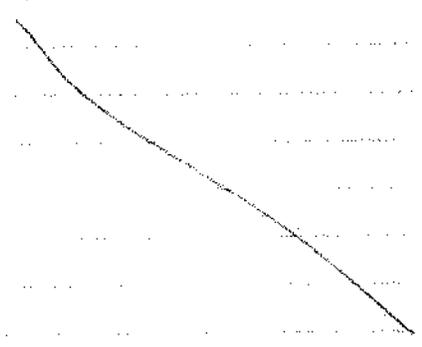
Notes - from discuss.
 while I was driving

* - Stop work and
 conflict of in
 would have a
 PE has a set
 reflect priority
 not complete

* - Maint. has
 truck, but not

* - Maint. does
 referred to
 - They have it

* - With new B
 going to have
 - 87 BME
 28 cents



2:46 PM
~~2:18 PM~~

SE corner

liment + track
top part, sediment
bottom part - sediment
in pond
at in middle up to top
- there were 3 at
at below bottom track

drop structure
weat
weat
his
change to creek

construction site
404 permit
will check for stake

3:05 pm

@ state.co.us

to car, done
3:20 pm

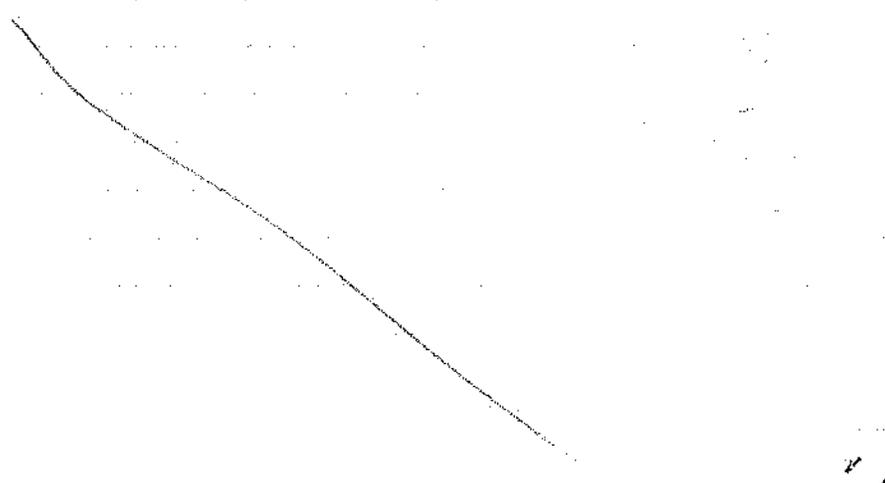
Note) - from discussion w/ Sonya
while I was driving today 5:20 pm

* - Stop work order - could be a
conflict of interest. b/c PE
would have to issue it, but
PE has a schedule + it might
reflect poorly on the PE if
not completed on time.

* - Maint. has access to a
truck, but not all the time

* - Maint. does not have to
respond to keep up w/ BMPs
- they have told her this/implied this

* - With new BMPs, she is not
going to have the time to get all
- 87 BME
- 28 cont. sites



4th St. Bridge

- Reviewer

Drainage Design Hydraulics Report
S.H. 94A (4th Street) Over
the Arkansas

- prepared by Ayres Associates
June 2017

- Included Riprap Sizing for 54"
pipe outfall calculator

Urban Drainage Vol. 2 p HS-67

* Narrative states inlet & pipes
designed for 25-year to
collect 100%, last BMP - ~~is~~

- Note in detail says it shall
be a "Bypass 3K Separator
Unit"

- Mike

- bypass pipe would likely
capture first 3-4 months
storm, extra will bypass

12:06 - 4th St. Bridge

found 2 manholes for Bypass

* trash in 1st

- manhole prior to interceptor
full trash & sediment

* - can only see 1 inlet &
1 outlet, others buried

* viewed to final outfall - rip rap covered
trash sediment

Leads 12:40

looked for sketch

- could not find

- pond LxW approx

150 - Heavy 50 +

* Sonya says there
system is under
see a green
* assumed to be yes

Rip
rap

↓

* at outlet used to
it to slow down

* sediment above p
- it's on asphalt

* trash

* were able to dig
6" down

Design Hydraulics Report
... (4th Street) Over

250
x. Ayres Associates
217

no sizing for 5.4"
calculator

... Vol. 2 p. HS-62
also inlet + pipes
... 25-year to
best BMP - etc

... says it shall
... 3K Separator

... would likely
... first 3-4 months
... extra will bypass

Bridge
ok for Bayview

... to intercept
... Sediment
... see 1 inlet +
... then buried
... outfall - rip rap covered
... not

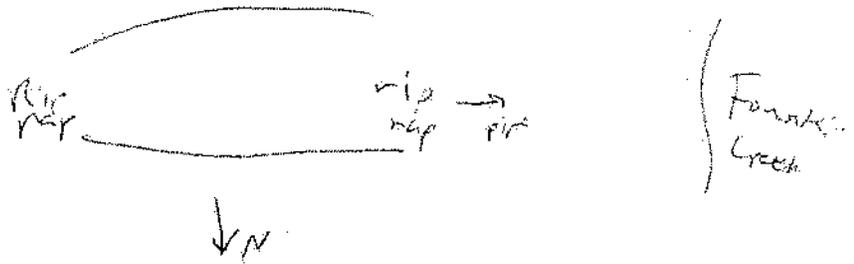
Leaked 12:40

looked for source at 1:30 - 1:40

- could not find it
- pond LV no outlet on S or NE

1:50 - Heavy SO at Franklin Creek

* Says says there is an under drain
system under it, she could
see a green pipe in old photos
~~...~~ assumed to be perforated



* all outlet used to have a cap on
it to slow down flow
* sediment above pond is new
- it's an asphalt

* tank

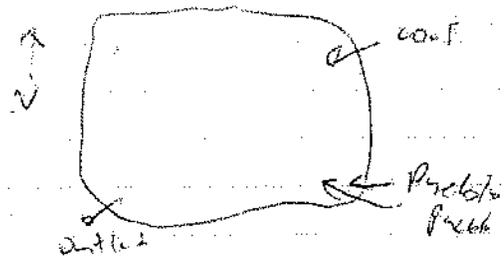
* were able to dig at least
6' down

1:55

2:05 pm

Willow Pond - Bob + Mike not present
- Also track Pueblo W/L

- * Mills on site
- * CPOT's shared inlet fell off



- * can't see holes in bottom of outlet
- * debris on top of overflow
- * ~~fresh~~ Pueblo inlet = sediment/debris

2:23 out

Suzanne + Megan left
1480 Quail Lake Loop Rd.

Transportation
Casper City Mar 1

- Alexis, Stephanie - E
- Bob, Mike - coast
- Chuck Kline - M4

Heavy 115 to Co
Road Maint., Salt

- Salt + Sand e parcel
- load on concrete
- no solid deicer truck
- sleep after ev
- liquid deicer
- Drug yard 3x5

- Road application
- we in tower (preimprter)
- we no deicer need
- try not to in tower (can quality issues)
- Can adjust g based on amount of
- have cut down

equip. sta.
to the outside

through property
Arrows view

POD gate
not closed - procedure

11/23 w/ been here
have come close to

10/23 began
out 4:10 pm

4/2/15 - Quail Lake office in C. Springs

Stephanie + Alysia - EPA
Sanya - CDOT - 7:55 am

ArView has 2013 Perm. BMP Inspect

* 87 + I-25 + EPA Form BMP

- 15 active sites

* 9 stabilization inspection results

- Plans to add as built some have
hydraulic report attached

- Filtreras - has a maint. manual
for all Filtreras, specific to
the locations

* I-25 - Inspection ^{Feb} ~~Area~~ - Aug 2014
July ²⁰¹⁴ stop work order
March - Aug 2013

- Paid a consultant to scan all
relevant hydro reports, etc. into

ArView, if it exists, it should be in there

- All Regions have ~~access~~ access

- No Hydro Report in ArView -

- Hwy 50 + Fountain Creek

- Power Filtreras

Hydraulic
Andy Stecklein - ~~Hydraulic~~ Engineer & PM

- Developer plans - himself or hires consultant
- sees what will fit in flow & what BMPs would fit & what pollutant needs to be removed

eg low veg & ~~to~~ slopes →

- it can't fit BMP - look for off-site city/county owned - do a retrofit

Sizing

- flow rate → volume for time

- 80% TSS

- first flush - apply 1/2" over top of area -

= 100% water quality capture volume

- Construction inspectors check design is met

- ~~Const~~ Check all specs of the design

- Drainage Report - typically done by consultant, but Andy observed it, report goes to PM & then to Andy

- will make decision w/ PM

- Example issues:
pond placement
place where
be maintain

- ~~Set~~ a maint.

- ponds - req
be included

- typically
removed

- permit

- typical

or to

- E

or

- should

base

of

* Careful

maint.

no

added

install

* Design - no
permit for
only for

Hydraulics

Hydraulic Engineer + PM
himself or

if fit in Row
NPS would fit +
+ needs to be

veg + ~~the~~ slopes →

+ BMP - look
site city/counties
do a retrofit

to → Volume for

1) Inlet - apply 1/2"
top of area -
100% water quality capture
volume

speakers check
net
check all speaker
design

not - typically done
it, but Andy always
go to PM +
by
- decision w/ PM

- Example issue

Pond placement not in a
place where it can't easily
be maintained

- ~~Set~~ a maint. schedule

- ponds - request maint. schedule
be included in Drainage Report
- typically - sediment Year-
removal to keep retention
time

- vaults

- typical schedule depends
on terrain

- ~~Erosive~~ Erosive areas
w/ steep slopes
would be more
than 1/Year

- should inspect 1/Year +
base maint. schedule off
of that

* Careful not prescribe
maint. schedule, b/c
no Maint. resources
added after they started
installing them

* Design - no penalty in
permit for not maintaining
only for not inspecting

* I-25 issues - Andy helped get design changes to fix hydrology issues

- Andy thinks it was due to "ignorance" that it was not designed correctly
- tend to have these problems on Design Build projects

- Always easier for everyone on Design, Bid, Build b/c you have more time

- Design Build - less time for oversight
- more rescheduling
- more difficult to make change b/c everything moves more quickly, hard to get people to stop and go back when they are trying to get next step done

IGAs

- Andy involved w/ counterpart of City - discuss limits & make sure it meets needs
- agree on main, reduce costs & who pays,

* IGA or municipal document in - storm to attached report

- If outside LPOT would have L

- Some doesn't have which fits but she doesn't send report to - only know how to maintain it

- Maint. Schedule Shopping center to LPOT Admin approved schedule

- CRIT project - a reasonable - PM had had not what An

- City Project - St

Andy helped get
to fix hydrology

it was done
"that it was
not correctly
these problems
in Build projects

for Everyone
PID, Build b/c
more time

1 - less time for

reservations

difficult to make change
everything moves more
kly, hard to get
to stop and go
when they are
to get next step

not counterpart of
cost limits of
mass needs
maint., repair costs &

* IGA ^{not a burden} or if no impact to
municipal facility - no IGA,
document in Drainage Report
- Storm Water Quality Report
attached to Final Drainage
Report

- If outside LPOF at ROW, then
would have City maintain

- Some doesn't have list of
which City maintain,
but she doesn't know who to
send report to @ city
- only know when Maint.
tells her Maint. doesn't
maintain it

- Maint. Schedule

Shopping center that discharges
to LPOF Drain drain, he
approved schedule he permit given

- CRIT Project - he insists on
a reasonable schedule

- PM had final say, he
had not had PM go against
what Andy has recommended

- City Project - see Alycia's notes

Sonya CDOT office

Close out w/ Sonya, Rob Frei - Engr. Mgr.
- Sometimes give her report back w/

- maint. done
- have told her they don't have time or actual eqpt
- one time had told her they needed a piece of eqpt.

- Resources - typically works 50-55 hrs ^{week}
- Sonya trying to get a contractor to ~~do database~~ inspect water quality control structures
- also needs help w/ database

Q- Do Bid Builders have something in contracts where CDOT will pay for SW controls?

10/13

- Document Request
- Q- Send Bob
- have, I
- the w.
- Q- Sonya had

nya, Rob Frei - Engr.
re: report back w/
they don't have
catal equip.
had told her
1 piece of equip.

the works 30-50 hrs/week.
to get a contractor
to inspect water
at structures
to help w/ database

have something
where CDOT will
controls?

conf 10:30

Sonya CDOT office

2:40 pm
- 4/2/15

- Document Requests

□ Send Bob list of what I
have, he will give me
the 1-4/15/15

□ - Sonya had all 2012 inspectors

3:20 pm

Call to Sonya R2 - 6/22/15

719-227-3260

10:15 am

- left message - asked ^{about} ~~what~~ what PTDs mean on budget spreadsheet
 - tried to ~~leave~~ leave voicemail for Rob Frei but voicemail system kept cutting me off
- 719-227-3251

6/23/15 - 8:07 am Sonya called me back

PTDs = Permanent Treatment Device

- These are PWQEs identified in report in R2 budget.

6/23/15 - ~~8:27 am~~ 8:47 am
I called Sonya back.

- She never received formal training on SW
- & when she arrived, nobody knew she was supposed to be looking @ PWQEs
- CAR job came on challenge (JAP, etc)